



BOROUGH OF WIDNES.

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR 1900.

WIDNES :

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1901.

Borough of Widnes.

ANNUAL REPORT

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MEDICAL OFFICER OF HEALTH,
1900.

TO THE TOWN COUNCIL OF THE BOROUGH
OF WIDNES.

GENTLEMEN,

I have pleasure in submitting to you my Annual Report for 1900, on the Health and Sanitary Conditions of the Borough of Widnes, with Statistics of the Mortality Returns, Births, Notifications of Infectious Diseases, and the distribution of the same in the various Wards of the Borough.

As I stated in my last two Reports the conversion of old and dilapidated privies into water closets has been almost entirely suspended, due to the legal difficulties in dealing therewith. Consequently I advised that still greater precautions should be taken in the handling and disposal of nightsoil, and that further attention be given to disinfecting ash pits and privies after being emptied.

Several suggested sanitary improvements have been held in abeyance pending the decision of the Local Government Board, upon the Private Improvement Works executed in the Simm's Cross District.

Epidemic-Diarrhœa, Typhoid Fever, and Gastro Intestinal Diseases, have again been prevalent during the months of July,

August and September. From the tables appended it is observable that the mortality from these diseases has been high—104 deaths being registered.

There were also 41 deaths registered from Measles, and 20 deaths from Whooping Cough. This, to a large extent, accounts for the high mortality during the past year.

I can only restate that taking into consideration the ample, excellent and sufficient supply of water, the geographical position of the township, the capacity of the main sewers for the disposal of liquid filth, infected material and human excreta, and the great importance of having clean dwellings, I am strongly of opinion that the correct method of coping with the annual recurrences of epidemic diseases is in having all back passages properly paved and sewered, and by having an efficient water carriage system adopted throughout the whole of the township.

The hospital extension is now completed and will be used in every case requiring to be isolated.

Estimated Population—

A census taken by the School Board Officers, 31st July, 1900, gives the total number of inhabited houses to be 5121. Taking 5·8 as an average number of individuals to each house, the population should be 29,701.

At the last census the population was 30,011, calculating the annual increase for ten years to be 250, then as nearly as possible the population at present should be about 32,000.

Births—

The total number of births during 1900 was 999, giving a birth rate of 31 21 per thousand of the population.

Table of Births for each Month during 1900 :—

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ttl.
Males ...	50	35	54	41	53	46	37	39	36	27	63	38	519
Females	46	32	28	37	54	36	37	51	33	31	56	39	480
	96	67	82	78	107	82	74	90	69	58	119	77	999

Table of Births since 1891 :—

1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	Total
1013	1185	1137	1122	1135	982	1057	1084	1066	999	10780

Deaths—

I regret to have to report a high mortality during the past year. 643 deaths or 20·09 per thousand of the population.

A Table of Deaths since 1891, shewing the number of deaths each year :—

1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	Total
443	587	407	587	421	508	476	539	622	643	5230

A Table of Deaths shewing the mortality from all causes at sub-joined ages, during the year 1900 :—

MONTH	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	Above 65	At all Ages
January ...	15	5	1	4	24	7	56
February ...	15	15	1	2	15	13	57
March ...	23	22	1	2	25	2	87
April ...	16	25	3	2	18	2	66
May	9	16	4	3	17	5	54
June ...	7	6	2	4	8	2	29
July ...	8	9	2	—	14	2	35
August ...	56	6	3	1	12	1	79
September	18	3	3	2	13	5	44
October ...	11	7	1	7	9	4	39
November...	15	4	2	4	21	6	62
December...	13	7	3	—	9	3	35
Grand Total	206	135	27	31	185	59	643

Deaths from all causes—

	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Typhoid	Cholera	Diarrhoea	Enteritis	Erysipelas	Puerperal Fever	Phthisis	Other Tubercular Diseases	Cancer	Bronchitis, Pneumonia and Pleurisy	Heart Disease	Epidemic Influenza	Injuries	Suicides	All other Diseases	TOTAL
Under 5	40	5	7	20			21	70				15		56	2	1	6		98	341
Above 5	1	2	3	5	1			13	4	3	15	23	7	70	29	17	5	6	98	302

Typhoid Fever—

During the past year (1900) 40 cases of typhoid fever were notified to exist in the Borough, as against 128 cases in 1899, with a death rate of 5, as against 22 cases in 1899 and 21 cases in 1898.

The appended tables again shew that the outbreak and chief centres of infection are identical in time and place. The Health Committee have endeavoured to deal with this outbreak by appointing a Special Sub-Committee to inspect and superintend the thorough disinfection of all supposed infected centres. In every instance immediately on receipt of a notification of typhoid fever in a house, all back premises, passages, and privies, were disinfected most carefully and thoroughly.

Of the 40 cases notified during the year, 28 were removed to the Isolation Hospital, 5 deaths. The remainder were treated at home, no deaths. The most severe cases were removed to hospital. The deaths occurred as follows :—

1 day after removal		7 days' after removal	
2 days' ,,		11 days' ,,	
3 days' ,,		23 days' ,,	

Mortality from Gastro Enteritis, Enteritis, and Diarrhoea, during the year 1900, in the several Wards.

Month	Farnworth		Halton V.		Simms C's		Victoria		Waterloo		West Bank		Total		Gastro Ent.		Enteritis		Diarrhoea		Total	
															Under 5	Above 5	Under 5	Above 5	Under 5	Above 5		
January ...	1								2				3						2	1	3	
February ...										1			1		1						1	
March ...																						
April ...			1				2		2		2		7		1		5	1			7	
May ...									2				2		2						2	
June ...			1						5		1		7		1		5	1			7	
July ...									4		5		9		1		5	3			9	
August ...	1		2		8		15		13		8		47		19		16	1	11		47	
September ...	1		1		7		3		2		2		16		2		4	2	8		16	
October ...	1				2		1		2				6		2		3		1		6	
November ...					1		3						4		1		1	1			4	
December ...					1		1						2		2						2	
	4	5	19	25	32	19				19			104	30		1	41	9	22	1	104	

Typhoid or Enteric Fever cases notified during the year 1900.

	Jan.	Feb.	Mar.	Apl.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.	Total Fl.T
Farnworth ...						1	2	2		1	1		7
Halton ...					3		1		3				7
Simms Cross ...						1	2	2	1	3	5		14
Victoria ...									2	1	2		5
Waterloo ...								3		1	2		6
West Bank ...							1						1
					3	2	6	7	6	6	10		40

The following table shews the distribution of typhoid fever in the various Wards since 1890 :—

	Farnw'th	Halton	Simms Cross	Victoria	Waterloo	West Bank	Total
1890	9	23	7	26	30	14	109
1891	8	9	11	19	10	10	67
1892	4	22	21	18	14	28	107
1893	9	37	30	53	7	50	186
1894	1	31	15	25	12	32	116
1895	1	15	8	8	13	9	54
1896	8	19	14	34	70	69	214
1897	5	7	23	7	23	11	76
1898	9	9	16	21	53	27	135
1899	2	21	37	33	28	7	128
1900	7	7	14	5	6	1	40
	63	200	196	249	266	258	1232

Scarlet Fever—

There is a decrease in the number of cases of this Infectious and Contagious Disease, 158 cases being notified during the past year as against 211 in 1899. The cases were treated at home.

Return of Infectious Diseases notified and shewn in the various Wards in which they occurred for year ending December 31st, 1900—

WARD.	Small Pox	Enteric Fever	Scarlet Fever	Membranous Croup or Diphtheria	Erysipelas	Puerperal, Relapsing or Continued Fever.	Cholera.	Typhus Fever.	Total.
Farnworth	—	7	13	1	3	—	—	—	24
Halton	—	7	13	2	2	—	—	—	24
Simm's Cross	—	14	34	14	6	1	—	—	69
Victoria	—	5	18	5	5	—	—	—	33
Waterloo	—	6	41	1	—	—	—	—	48
West Bank.....	—	1	40	—	3	—	—	—	44
	—	40	159	23	19	1	—	—	242

Small Pox—

There has not been a single case notified during the past year, the last case notified being in 1896. Notwithstanding I advised the Health Authority to purchase a plot of land in a suitable locality in the North East corner of the Borough, for the purpose of isolating cases of this Disease. This they have done, so that a temporary structure of canvas, wood, or galvanized iron, may be placed there on short notice to cope with any outbreak.

Erysipelas—

Nineteen cases of Erysipelas were notified as against 21 last year, 26 in 1898, 28 in 1897, and 36 in 1896.

Puerperal Fever—

One case of Puerperal Fever was notified, as against 1 last year, 3 in 1898, 4 in 1897, and 4 in 1896.

Phthisis—

Fifteen deaths were certified during the year, as against 15 last year, 12 in 1898, and 19 in 1897.

Measles—

This disease is not notifiable.

Forty-one deaths from Measles were registered during the year, against four in 1899. In consequence I ordered the following circular to be delivered at each house in the Borough. When this disease was known to exist in any house, the children were advised to remain at home and cease from attending school. There has been no deaths registered since June last.

BOROUGH OF WIDNES.

M E A S L E S .

Many Children in this District are Affected with Measles.

Attention to the following will prevent the spread of this very Dangerous Infectious Disease.

- I.—Measles generally begins with Sneezing, Coughing, and “Running at the Nose and Eyes.” It is highly Infectious at this stage—even before any “Rash” comes out.
- II.—Every Child Suffering, or suspected to be suffering, in the beginning stage should be kept in a Warm Room, and away from other children.

A number of Children have Died in Widnes from Measles. In most of these cases, death was due to catching Cold during the attack of Measles.

III.—It is a Punishable Offence to allow any Child suffering from Measles to appear in any Street or Public Place.

IV.—Children from any Infected House must NOT, under any condition, attend School; and the House should be Disinfected when the attack is past.

Houses will be Disinfected Free of Charge on Application at the Sanitary Inspector's Office, Town Hall.

D. URQUHART MACLENNAN,

Medical Officer of Health.

TOWN HALL,

WIDNES, 1900.

Whooping Cough—

This disease is also not notifiable. Twenty deaths from this disease were registered during the year.

Isolation Hospital, 1900—

The new Buildings are now completed and will be ready shortly for occupation. The Corporation are now proceeding with the furnishing.

The following Table gives the number of cases treated in the Isolation (Fever) Hospital since 1890 :

			SCARLET FEVER.				ENTERIC FEVER.			
			No.	Treated	Deaths	Deaths	No.	Treated	Deaths	Deaths
			Notified	at	at	at	Notified	at	at	at
				Hospital	Hospital	Home		Hospital	Hospital	Home
1890	...	...	200	41	3	6	109	51	5	9
1891	...	...	64	15	1	2	67	31	6	0
1892	...	...	109	11	1	2	107	35	9	16
1893	...	...	31	2	0	1	186	73	21	11
1894	..	...	459	31	1	23	116	31	8	15
1895	...	...	601	82	5	21	54	42	6	5
1896	...	...	154	33	0	3	214	76	17	17
1897	...	...	49	13	0	2	76	48	10	6
1898	...	...	36	9	1	0	135	93	10	11
1899	...	...	211	26	0	11	128	64	12	10
1900	...	...	158	0	0	7	40	28	5	0
			2072	263	12	78	1232	572	109	80

Accident Hospital—

During the past year 104 cases were treated in the Accident Hospital, as against 89 in 1899, 66 in 1898, 90 in 1897, 105 in 1896, and 71 in 1895.

COPY OF ANALYSIS OF WATER

from Stock's Well and Netherley pumping stations, made by Dr. Campbell Brown, Liverpool, on the 20th April, 1900.

	Stocks Well		Netherley	
	In parts per 100,000		In parts per 100,000	
	1899	1900	1899	1900
Total solid matter in solution	18·6	15·68	16·6	13·72
Organic Carbon	·029	·024	·049	·017
Organic Nitrogen	·011	·011	·021	·006
Ammonia ...	·000	·000	·002	·000
Ammonia from organic matter by distillation with alkaline per- manganate	·000	·000	·000	·000
Nitrogen as Nitrates ...	·240	·284	·240	·153
Total Combined Nitrogen ...	·251	·295	·263	·182
Combined Chlorine...	2·0	2·0	2·2	2·2
Hardness Temporary...	0°·000	0°·000	0°·72	0°·14
Do. Permanent...	9°·14	9°·86	6°·71	5°·43
Do. Total...	9°·14	9°·86	7°·43	5°·57
Oxygen required to oxidise in 15 min.	·001	·000	·002	·0
Do. do. do. in 3 hrs.	·005	·007	·012	·0

Both samples of excellent quality.

With regard to the quantity of water supplied during the year 1900, this amounts to 914,112,174 gallons, of which 663,901,000 gallons were used for manufacturing purposes, and 250,211,174 gallons for domestic and sanitary purposes.

I am indebted to the courtesy of Mr. Isaac Carr, M.I.C.E., Engineer and Manager of the Gas and Water Works, for the above report.

Sanitary Work Accomplished—

The Sanitary Inspector carries out the work entrusted to him energetically and satisfactorily. I have pleasure in appending his annual report for 1900.

Sanitary Precautions—

On 20th June, I repeated similar orders to those of 1st September, 1897, viz :—

- 1—All back passages in course of construction to be systematically and frequently disinfected during the months of June, July, August and September. Particular attention to be given to places where foul liquids or human excreta comes through defective walls.
- 2—Passages being made, to be disinfected with hand water cart. The main streets to be disinfected with horse carts with a solution of Carbolic Acid.
- 3—Privies on being emptied, and any fouling of streets to be at once disinfected.
- 4—Urinals to be systematically attended to by disinfectors.
- 5—Sewers to be frequently flushed. Special and more frequent attention to be given to sewers in the lower part of the Borough.
- 6—The disinfectant chiefly to be used to be Hypochloride of Soda, strength 1 per cent. solution by volume.

Insanitary Property—

Several cases have been dealt with during the year, vide Sanitary Inspector's Reports.

Works—General—

Escape of Gases—

During the past year many complaints have been made with respect to the escape of Gases in the Township, causing a nuisance. On looking over the 36th Annual Report on Alkali Works for the year 1899, the Local Inspector, Dr. Affleck, states that "In the Town itself, the local nuisances, caused by the large volumes of waste gases emitted by the various processes, has been much the same as for some years past, or perhaps rather greater, on account of the greatly increased activity in the works. Its chief sources are (1) the highly Acid Sulphureous Gases (So^2 and So^3) emitted from works, and (2) the emission of Sulphuretted Hydrogen from the yellow liquor mains and culverts, and some sections of the town sewers."

There have also been complaints made of the irritant pyroligneous fumes emitted from an Acetic Acid Works in the vicinity of Waterloo Road. In consequence of the complaints, I made several inspections during the year, and I communicated with the Manager of the works carrying on these processes.

I have also, at several points, tested the town sewers, but could not detect escapes of Sulphuretted Hydrogen coming from the manholes. This matter is receiving further attention.

Food & Drugs Act—

I am indebted to Superintendent Keighley, of the County Police, for the following report :—

Return of Samples taken under the Food and Drugs Act for year ended 31st December, 1900.

No.	Description of Sample.	Result of Analysis.
254	New Milk	Very poor
255	New Milk	Genuine
256	New Milk	„
257	New Milk	„
258	New Milk	„
259	New Milk	„
260	New Milk	„
261	Irish Whiskey	„
262	Rum	„
263	Butter	„
264	Pepper	„
265	Butter	„
266	Coffee	„
267	Butter	„
283	Beer	„
284	Beer	„
285	Beer	„
286	Beer	Contained small quantity of Arsenic
287	Beer	Genuine

The Beer containing Arsenic was poured down the sewers.

Borough Surveyor's Report—

The Borough Surveyor (Mr. J. S. Sinclair, A.M.I.C.E.), has favoured me with the following particulars of the Sanitary work executed in his department during the year.

Nightsoil Work & Scavenging—

The ashpits and privies in the whole of the Borough, except the rural portion, continues to be emptied on the Block System, that is :— each ashpit is emptied about once every three months without receiving any notification from the householder. Very little progress has been made during the year with the abolition of the very wet and deep privies and the conversion of the M.C. cesspools into the water-carriage system. These deep and wet privies give extra work to the Nightsoil Staff, and I fully reported upon this matter to the Nightsoil Sub-Committee in the month of September, 1900. The number of loads of refuse removed during the year was 8812. The shop refuse is removed each working day by the road scavenging carts in the day

time, the shopkeepers placing their refuse-boxes on the street at stated times so that the contents may be taken away. Trade refuse is removed by arrangement at the cost of the persons requiring the work to be done.

Scavenging and Street Watering—

The number of Scavengers employed is 27. There are 31 miles of public highways, and seven miles of passages. All the adopted highways, streets, and passages, are swept about twice each week; the main roads are also cleansed with the rotary machine—horse brush. The sweepings are removed to the Moor Lane Dépôt, the number of loads removed being 2050. On Sunday mornings Albert Road, Widnes Road, Waterloo Road, Victoria Road, Mersey Road, and Ann Street, are scavenged and the loose paper and rubbish removed. This method of scavenging and removal does not apply to the rural portions of the Borough.

Street watering is done during about six months of the year, commencing generally in May, and ending in October. On an average our water vans containing about 450 gallons, and three hand cart water barrels containing about 36 gallons are employed. The amount of water used in street watering was 1,001,000 gallons.

Sewer Flushing and Cleaning—

A gang of men are employed continuously throughout the year in examining, cleaning, and flushing the sewers. The three sewer outfalls into the River Mersey are in a satisfactory condition, the deep water channel still continues to flow on the Lancashire side of the river and no silting up of the sewer outlets has been experienced this year. The whole of the main sewers, with a few exceptions which have been reported to the Highway Committee, are in a satisfactory condition, being well ventilated and free from much deposit. The 15 in. pipe sewer in Birchfield Road has been continued 50 yards northward, as far as the newly built property. The defective brick and pipe sewers in portions of Victoria Street, Edmund Street, Elizabeth Street, and part of Ann Street East, are being taken up and relaid with 15 in., 12 in., and 9 in. diameter glazed, socketted, pipe sewers, with good self cleansing gradients. This work is being done by the Corporation Staff at an estimated cost of £400, and this sum has been obtained from the Local Government Board.

The automatic flushing tanks, penstocks, and flushing gates in connection with the main sewers have been periodically examined and kept in working order. The total amount of water used in sewer flushing by the automatic tanks and four wheel cart vans during the year was 1,244,544 gallons. Where considered necessary, disinfectants are employed in conjunction with the water used for flushing sewers.

Public and Private Urinals—

There are six public urinals maintained by the Corporation and cleansed each day, Sundays included, by the Scavenging staff. There are also 24 private urinals attached to licensed houses and cleansed by the owners.

New Buildings—

Plans have been approved for 27 dwellinghouses, — shops, 3 other buildings, and 3 alterations.

(Signed)

J. S. SINCLAIR.

Bakeries—

The Bakeries were duly inspected and found in clean and sanitary condition.

Slaughterhouses—

All the slaughterhouses on inspection were found clean and kept in good order.

Lodginghouses—

The lodginghouses were also inspected and found clean and in a satisfactory condition.

General—

The Medical practitioners in Widnes and District have loyally supported me in carrying out my duties, for which I sincerely thank them.

I am, Gentlemen,

Your obedient Servant,

D. U. MACLENNAN,

Medical Officer of Health.

